Bently Nevada 3300 Series Service Manual

74712-06-05-04-01

1. Description

74712-06-05-04-01

3. Product Information

74712-06-05-04-01 | Bently Nevada | High-temperature Two-wire Transducer

Manufacturer : Bently Nevada

Product No. : 74712-06-05-04-01

Product type : 74712 = High-temperature Two-wire Transducer

Made in U.S.A

Transducer Mounting Angle/Minimum Operating Frequency Option : 06 = 0 ±100, 10 Hz (600 cpm)

Mounting Base Option : 05 = No base; 1/2-in 20 UNF-3A stud

Connector Option : 04 = Side mount

Agency Approval Option : 01 = CSA

Height : 82 mm (3.2 in)

Height : 102 mm (4 in) typical (depends on connector option).

Diameter : 41 mm (1.6 in) typical.

Operating and Storage Temperature :-29°C to +204°C (-20°F to +400°F).

Electrical

Sensitivity 20 mV/mm/s (500 mV/in/s), ±5% when properly terminated and oriented at the angle of calibration.

Calibration Load 10 kΩ Terminal "A" to "B"

Output taken across pins "A" and "B"

Sensitivity Temperature Coefficient 0.2%/°C

Dynamic operating range 2.54 mm (0.100 in) peak to peak maximum displacement.

Velocity Range 25 mm/s (1 in/s) (at +22 °C of casing vibration at 100 Hz with a 10 kΩ load.

Coil Resistance 1.25 kΩ ±5%

Locked Coil Inductance 125 mH, typical

Amplitude Linearity ±5% from 0.01 to 5.0 in/s

(0.254 to 127 mm/s) at 100Hz (6000CPM)

Shock resistance Withstands 50 g peak maximum acceleration along non-sensitive axis.

Transverse sensitivity ±10% maximum of the sensitive axis sensitivity at 100 Hz and 1.0 in/s (2.54 cm/s)

Polarity of output signal Pin A goes positive with respect to Pin B when the transducer case velocity is towards the connector.

Lead wire length 305 meters (1,000 feet) maximum between Seismoprobe Velocity Transducer and 3300 or Bently Nevada™ 3500

Monitor. Consult manual for frequency roll-off at longer lengths.

Relative

Humidity

To 95%, noncondensing.

100%, non-submerged, when

ordered with integral cable.

Maximum Use

Altitude

2000 m (6,561 ft) above sea

level.

Mounting Torque

1/2-20, 1/4-

20, 1/4-28,

5/8-18, or

M10X1

mounting

base

options:

5.6 N•m (50 in•lb)

8-32

threaded

studs:

1.41 N•m (12.5 in•lb)

Hazardous Area Approvals

cNRTLus

Class I, Division 1, Groups A, B, C and D T6;

Class II, Division 1, Groups E, F and G;

Class III:

Ex ia IIC T6 Ga;

Class I, Zone 0, AEx ia IIC T6 Ga;

Ex ec IIC T6 Gc;

Class I, Zone 2, AEx ex IIC T6 Gc

For Ex/AEx ia:

Ui = 28 VDC

Ii = 16 mA

Pi = 1.0 W

Ci = 0

L/Ri = 110 µH/Ω

Li = 131.25 mH

For EX/AEx ec:

V = 24 VDC

I = 24 mA